REMARKS

Claims 1-4 are pending.
Claims 1 and 3 are amended.

Claim 1 is amended as to replace the word "course" with the word "coarse", as suggested by the Examiner.

Claim 3 is amended to recite "as to find" instead of "to find". This amendment is for grammar purposes.

No new matter was added in view of these amendments.

The Examiner requested a copy of the oath/declaration by stating that the submitted oath/declaration with the application was defective.

1. Applicants informed the Examiner that it appeared that the oath and declaration could not in fact include that application and filing date because the oath and declaration were filed at the same time as the application.

2. The Applicants then faxed over a copy of the oath and declaration to the Examiner (on August 12, 2005) that claims priority from the provisional application, which the Applicants believe were submitted with the application at the time of filing.

3. The Applicants note that the dates that the three applicants signed the oath and declaration (Jan. 13, 2000, Jan. 13, 2000, and Jan. 30, 2000) are before the date of filing this application, Feb. 1, 2000.

4. It appears that if an error was made, it was that at the time of submission of the patent application, the party who filled out the not properly fill out the patent application transmittal sheet by indicating that the oath and declaration were included with the patent application at the time of filing.

5. Applicants believe that the requirements of 37 C.F.R. 1.67(a) were met at the time of filing and request that the Examiner remove the objection as to the oath and declaration being defective.

I. 35 U.S.C. § 103 Rejection of Claim 1

Examiner rejected Claims 1 under 35 U.S.C. §103(a) as being unpatentable

over the article "MPEG-4: An Object-Based Multimedia Coding Standard Supporting Mobile Applications," by Puri et al. (hereafter called Puri) in view of the article "Recent Efforts Towards Graphics Standardization," by Newman and Van Dam (hereafter called Newman). Applicants disagree with these grounds of rejection because the combination cited by the Examiner of disclosing the step of "estimating from the bitmap and a display aspect ratio a binding box for the object of interest" is improper. One skiiled in the art would not be motivated to combine both references in the manner stated by the Examiner.

The Puri article, cited by the Examiner, details an operation of forming a bounding box around a Video Object (VO) that resides in a Video Object Plane (VOP). In such, the Puri details that:

"For the binary alpha plane, a rectangular bounding box enclosing the shape to coded is formed such that its horizontal and vertical dimensions are multiples of 16 pixels (macroblock size). For efficient encoding, it is important to minimize the number of macroblocks contained in the bounding box," (Puri, page 14, col. 1).

Hence, the formation of the bounding box formed by using blocks that are of a multiple of 16 pixels in both the horizontal or vertical direction. The formation of the bounding box in Puri does not disclose or suggest the need to incorporate a "display aspect ratio" as cited by the Examiner from Newman into the operation of the bounding box (not binding box as claimed) because it is not apparent that the inclusion of display aspect ratio assists either in the formation of a bounding box or using the bounding box of Puri to encode (i.e. compression either lossy or lossless) a shape (see Puri, page 14, cols. 1-2 concerning the encoding of the shape). This combination therefore does not disclose or suggest the step of "estimating from the bitmap and a display aspect ratio a binding box for the object of interest" of Claim 1.

One skilled in the art would not combine Puri with the teachings from Newman in the manner suggested by the Examiner because either the formation of a binding box or the encoding of a shape have nothing to do with "improved portability across various types of displays" as offered by the Examiner as the motivation to combine both references.

Newman refers to issues that may develop when trying to write a software graphics program that is used at different sites. The recitation of a screen's aspect ratio identifies a problem that a software coder may face when trying

to write such software (see Newman, page 372 col. 2 to page 374, col. 2.) The issues surrounding software design and what methodology a computer programmer may face for multiple programming platforms are completely removed from what is disclosed in the encoding of a shape or the formation of a bounding box as written about in Puri.

Therefore for the reasons given above, the Applicants assert that Claim 1 is patentable. Applicants request that the Examiner remove the rejection to this claim.

II. 35 U.S.C. § 103 Rejection of Claim 2

The Examiner rejected Claim 2 as being unpatentable under 35 U.S.C. §103(a) over Puri in view of Newman and in further view of Blumberg (U.S. Patent # 6,449,639). The Applicants disagree with this ground of rejection.

The Examiner cites to Blumberg, in further combination of Puri and Newman, as disclosing the claimed steps of Claim 2. Applicants assert that Blumberg with the other two references has nothing to do with the claimed steps "estimating in pixel units a set of parameters for the binding box; and normalizing the pixel units to form a feature vector representing the binding box," as claimed in Claim 2.

Blumberg discloses an operation of accessing a rectangular part of an image (for example for a zoom operation).This type of box is not a binding box which is developed to bind a shape, but rather is to define an area of an image, where the part of the image being requested is in a rectangle (Blumberg, col. 5, lines 45-57). This rectangle from Blumberg has nothing to do with the attributes of a shape which would be surrounded in a binding box as claimed in Claim 2. Hence, the disclosed parameters of the rectangle of Blumberg, in combination with Puri and Newman, are not parameters for the binding box as claimed in Claim 2.

Therefore for the reasons given above, the Applicants assert that Claim 2 is patentable. Applicants request that the Examiner remove the rejection to this claim.

III. 35 U.S.C. § 103 Rejection of Claim 3

The Examiner rejected Claim 3 as being unpatentable under 35 U.S.C. §103(a) over Puri in view of Newman and in further view of Blumberg, and even further view of Jain (U.S. Patent # 5,893,095). The Applicants disagree with this ground of rejection.

Applicants assert that the combination of Puri, Newman, and Blumberg, do not disclose or suggest the need for "searching a video database" from Jain, as suggested by the Examiner, because the total combination of references are completely directed towards different operations (video encoding, software design, locating an area of an image in view of explicit coordinates, and searching for matching video images in a database). One of the ordinary skill in the art would not combine all such references, unless one applied hindsight of the Applicants' invention to locate the claimed elements of Claim 3, in the manner as suggested by the Examiner because there is no motivation to combine all such references.

Therefore for the reasons given above, the Applicants assert that Claim 3 is patentable. Applicants request that the Examiner remove the rejection to this claim.

IV. 35 U.S.C. § 103 Rejection of Claim 4

The Examiner rejected Claim 4 as being unpatentable under 35 U.S.C. §103(a) over Puri in view of Newman and in further view of Blumberg, and even further view of Jain, and in further view of Crabtree (U.S. Patent # 6,185,314). The Applicants disagree with this ground of rejection.

The Examiner combines all of the cited references above, without disclosing why one skilled in the art would be motivated to "compute aspect ratios for all visible objects in the video database", "sorting the distances in descending order", and "displaying the visible objects associated with the aspect ratio that are at the top of the list". The Examiner states that this combination is desired because the implied combination provides "easy and efficient access to the object in the digital picture", specifically as to use aspect ratios for the searching method.
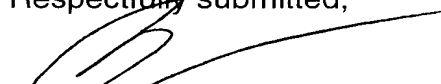
The Examiner has not established why aspect ratios must be used for this process, why the cited order of how distances are calculated is descending, or why visible objects are displayed at the top of the list, without applying hindsight as to combine all of these references to disclose the claimed features of Claim 4.

Therefore for the reasons given above, the Applicants assert that Claim 3 is patentable. Applicants request that the Examiner remove the rejection to this claim.

Applicants request a two-month extension under 37 C.F.R. 1.136(a) to submit this response. Please charge the fee for this extension and any other fees owed in connection with this paper to Deposit Account #07-0832.

Respectfully submitted,

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